

# Pathways to a Fusion Ready World

# The Path to funding fusion will have many financing options, on this panel we are discussing three important options:

• Public Dollars – DOE: FES, ARPA-E, support for INFUSE

Private Dollars – Impact investment, patient capital: BEV

• Philanthropy – Individuals, families, trusts, foundations such as: Gates, Vulcan, Rockefeller Brothers, Energy, SURDNA and Hewlett



• We are all here because we are connected to the first

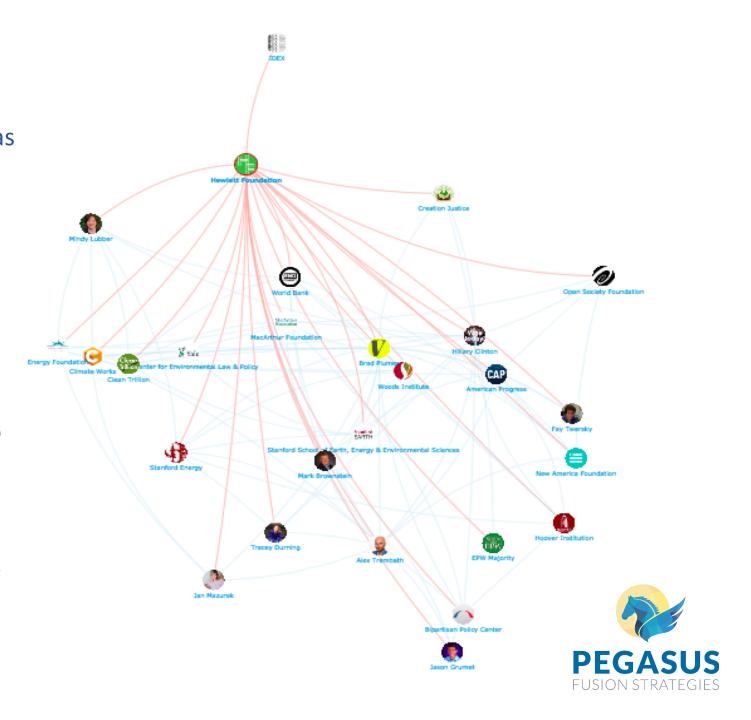
We are seeking the second through investment capital

• However, the third: Philanthropy, is less understood



### **Hewlett Foundation**

- Foundation's Energy & Climate Program has one overarching goal: "To ensure that energy is produced and used cleanly and efficiently, with limited impacts on human health and the environment, and that global average temperatures increase less than 2°C to avoid the worst effects of climate change."
- The Environment program is committed to the 100% renewables paradigm.
- Its Clean Power program aims to "Increase renewable energy and energy efficiency while reducing fossil fuel development and use for electricity generation."
- Messages: energy investment, clean tech.



 Think of Philanthropy as a bucket into which donations can be collected and dispersed as long as there is no profit motive or financial gain on the part of the donor

 Part of the designation is defined by a not-for-profit, charitable tax status where money is given without expectation of return. Within this sector are numerous subsets, with the biggest distinction being how the charity uses its gifts



#### These Gifts are used without a profit motive to:

- Support early stage programs still housed within a non-profit setting like a university or lab
- Within limits fund mission related endeavors at for-profit companies
- Support technical or policy work in support of a general mission
- Support advocacy work done in the public interest to engage gatekeepers, opinion leaders and technical experts



- Any individual, any company, from any industry can make charitable gifts
- Most charitable foundations pool donations for further gifting or for actions in keeping with their mission or purpose
- For example, a key interest of the Stellar Energy Foundation, which Matt Miller will discuss later, is to act as a charitable pool for donations to fund technical projects
- Most universities are non-profit and set up to receive gifts which they pool toward educational missions, projects, students and professors
- Most advocacy non-governmental organizations are non-profits, operating on donations, investments or other gifts given in support of the NGO's nonlobbying mission. The donors receive a tax benefit

# Why and how engage philanthropy



 Unlike financing where a return on investment is the common currency, philanthropies are mission oriented

- A foundation must be convinced that funding work in a specific sector
  - say fusion advocacy aligns with its mission
- Therefore our outreach must align fusion to their mission
  - NGOs who might be funded would advocate for fusion as it relates to their mission goals, such as protecting the environment, public health or conservation



 Philanthropy supports advocacy work that can help pave the way for regulatory, licensing and public support of fusion

• It funds NGOs who's missions are to protect the environment, public health and safety by representing the public's interest in research, technology, federal funding, state and federal policies, utility rate cases, and the siting and permitting of generation



- These NGO's can mobilize membership, translate complicated environmental and public policies for public understanding and create the political will to support or oppose
- They have expertise and relationships at all levels of the political, corporate, technology, educational and financial leadership and are the public's standing experts, with mission-based responsibilities rather than commercial
- Many commissioners, agencies and other regulatory leadership have roots in this sector



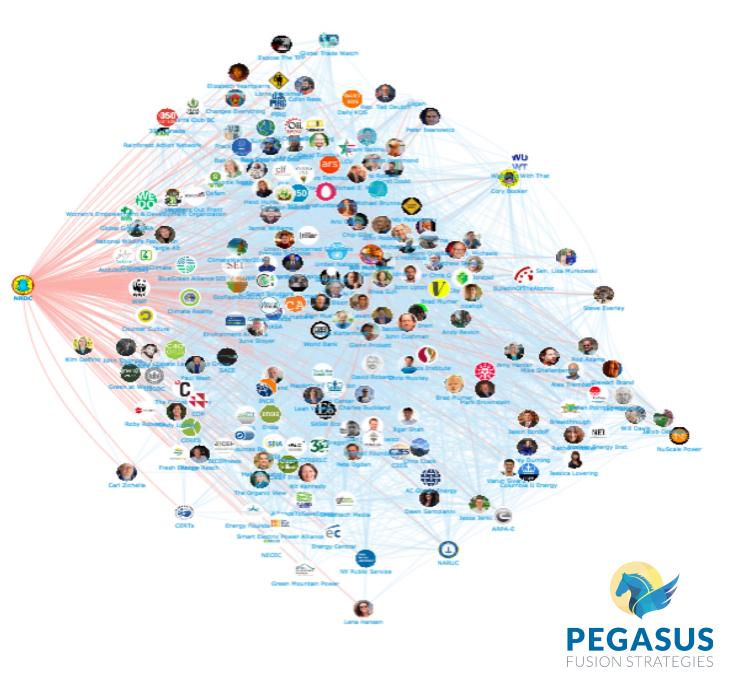
#### **Example of early NGO engagement**

Recent meetings between ARPA-E and Natural Resources Defense Council (NRDC) staff drive home the following:

- Concern with industry developed regulation associated with the NRC
- Need to establish trust through transparency especially in understanding fuel cycle, environmental, public safety, waste, and proliferation issues
- Suggestion for use of the EPA's RCRA collaborative regulatory model
- Cradle-to-grave thinking when looking at impacts and opportunities

#### **NRDC**

- NRDC has an enormous online network that originates in all parts of the environmental/political spectrum.
- NRDC appears to be one of the only NGOs that is able to initiate conversations and dialogue with a wide range of thoughtleaders on social media.
- NRDC is particularly active on non-climate environmental damage caused by fossil fuels, e.g. ocean acidification and coral bleaching.
- Unlike many other NGOs its network is well interlinked. It engages with pro 100% renewables organizations e.g. Sierra Club; 350.org as well as with clean energy.



 So, what do we do if we want science and policy advocates and experts to be interested and engaged in fusion?

To be our allies in creating markets for fusion

 To collaborate with us in preparing the grids, markets, utilities, regulators and public for fusion



- Get to know who the leaders are, you are already doing this within your investment circles
  - Consider this an investment which will save time and create beneficial partnerships

 Devote time and work with others such as Pegasus, Stellar, ARPA-E and FIA who are developing these relationships on behalf of fusion

Network: Speak at fusion and non-fusion workshops and gatherings



#### Don't forget there is a direct benefit to each new fusion project:

- Most foundation boards are comprised of influential individuals, all of whom should be educated about fusion
  - You never know whose voice will make the greatest impact on your own funding, regulations or corporate support
- The community of philanthropic boards overlaps with impact investors
- Your financing rounds have paved the way



#### Therefore an engaged philanthropy can deliver:

- Interest of key board members and their spheres of influence
- Validation of fusion's importance to global clean energy needs and climate change
- Technical support to mission aligned projects
- Create multiple avenues of support through the army of organizations they fund and the members they influence



#### Proactive philanthropy engagement will add to all three buckets:

- Educate influencers with broad range and build support and credibility for fusion's public dollars
- Increase the private investment knowledge and understanding, potentially reaching into as yet, unidentified pools of private capital
- Engage mission money -- fund fusion's public interest support



## Thank You

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